

C1
to grow a silicon single crystal ingot having a diameter of 4 inches or more used for a solar cell.

C2
38. (Amended) The method for production of silicon single crystal to which Ga is added according to Claim 37 wherein addition of Ga to a melt in a crucible is conducted by growing a silicon crystal ingot in which Ga of high concentration is added previously, and crushing the silicon single crystal doped with Ga in high concentration to prepare a doping agent, and adding Ga in the silicon melt using it.

39. (Amended) The method for production of silicon single crystal to which Ga is added according to Claim 37 wherein the number of rotation of a crucible while the single crystal ingot is grown is 30 rpm or less.

40. (Amended) The method for production of silicon single crystal to which Ga is added according to Claim 37 wherein a pressure in a furnace of a pulling apparatus while the silicon single crystal is grown is in the range of 10 to 500 mbar.

41. (Amended) The method for production of silicon single crystal to which Ga is added according to Claim 37 wherein an amount of inert gas to be flown in a furnace of a pulling apparatus while the single crystal is grown is in the range of 10 to 500 l/min.

42. (Amended) The method for production of silicon single crystal to which Ga is added according to Claim 37 wherein the inert gas flown in the furnace of the pulling apparatus while the single crystal is grown is argon.

5b2
C3
43. (Amended) The silicon single crystal to which Ga is added according to claim 20 wherein the resistivity of the single crystal is 5 $\Omega \cdot \text{cm}$ to 0.2 $\Omega \cdot \text{cm}$.

44. (Amended) The silicon single crystal to which Ga is added according to claim 21 wherein the resistivity of the single crystal is 5 $\Omega \cdot \text{cm}$ to 0.2 $\Omega \cdot \text{cm}$.